AMENDMENTS TO THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

- 1. (Original) A structure control method comprising irradiating a mixture of nano-scale low-dimensional quantum structures of differing densities of states with an electromagnetic wave in an oxygen atmosphere, so as to selectively oxidize a low-dimensional quantum structure of a density of states resonating with the electromagnetic wave.
- 2. (Original) The structure control method as set forth in claim 1, wherein the mixture is irradiated with the electromagnetic wave so as to remove from the mixture the low-dimensional quantum structure of a density of states resonating with the electromagnetic wave.
- 3. (Currently Amended) The structure control method as set forth in claim 1—or—2, wherein the low-dimensional quantum structures comprise nanotubes or nanoparticles.

2

New PCT National Phase Application Docket No. 12480-000162/US

4. (Currently Amended) The structure control method as set forth

in any one of claims 1 through 3claim 1, wherein the low-dimensional

quantum structures comprise carbon or boron nitride.

5. (Currently Amended) The structure control method as set forth

in any one of claims 1 through 4claim 1, wherein the low-dimensional

quantum structures have a single-walled structure.

6. (Currently Amended) The structure control method as set forth

in any one of claims 1 through 5claim 1, wherein the electromagnetic

wave is a laser beam.

7. (Original) A producing method of a nano-scale low-dimensional

quantum structure, comprising the step of irradiating a mixture of

nano-scale low-dimensional quantum structures of differing densities of

states with an electromagnetic wave in an oxygen atmosphere, so as to

selectively oxidize a low-dimensional quantum structure of a density of

states resonating with the electromagnetic wave and thereby remove a

structure with the density of states resonating with the electromagnetic

3

New PCT National Phase Application Docket No. 12480-000162/US

wave.

8. (Original) A producing method of a nano-scale low-dimensional

quantum structure, comprising the step of irradiating a mixture of

nano-scale low-dimensional quantum structures of differing densities of

states with an electromagnetic wave in an oxygen atmosphere, so as to

selectively oxidize a low-dimensional quantum structure of a density of

states resonating with the electromagnetic wave and thereby retain a

structure with a density of states not resonating with the

electromagnetic wave.

9. (New) The structure control method as set forth in claim 2,

wherein the low-dimensional quantum structures comprise nanotubes

or nanoparticles.

10. (New) The structure control method as set forth in claim 2,

wherein the low-dimensional quantum structures comprise carbon or

boron nitride.

11. (New) The structure control method as set forth in claim 3,

4

wherein the low-dimensional quantum structures comprise carbon or boron nitride.

- 12. (New) The structure control method as set forth in claim 2, wherein the low-dimensional quantum structures have a single-walled structure.
- 13. (New) The structure control method as set forth in claim 3, wherein the low-dimensional quantum structures have a single-walled structure.
- 14. (New) The structure control method as set forth in claim 4, wherein the low-dimensional quantum structures have a single-walled structure.
- 15. (New) The structure control method as set forth in claim 2, wherein the electromagnetic wave is a laser beam.
- 16. (New) The structure control method as set forth in claim 3, wherein the electromagnetic wave is a laser beam.

- 17. (New) The structure control method as set forth in claim 4, wherein the electromagnetic wave is a laser beam.
- 18. (New) The structure control method as set forth in claim 5, wherein the electromagnetic wave is a laser beam.